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ABSTRACT

Five papers, discussing research on nonwhite disabled persons, were presented at a 1984 conference on the needs of this population. In "Innovative Approaches and Research in Addressing the Needs of Nonwhite Disabled Persons," B. J. Atkins examines counseling approaches and research needs. In "The Role of Social Support in Disease Severity in Chronically Ill Black Patients," F. Belgrave and D. Moorman-Lewis report on a study indicating that social support was significantly associated with disease severity in black adults with sickle cell disease or diabetes. In "Patients' Perceptions of Their Adjustment to Disability and Social Support in a Community-Based Teaching Hospital," S. Miller reports that family and social work support are significant factors in the adjustment of patients to a disability. In "Frequency and Distribution of Disabilities among Blacks: Preliminary Findings," S. Walker, et al., discuss a study which found that disabled whites were 2 or 3 times more likely to be clients of a sample of 27 service agencies despite census data indicating a higher incidence of disabilities among blacks. In "Critical Vocational Rehabilitation Service Delivery Issues at Referral (02) and Closure (08, 26, 28, 30) in Serving Select Disabled Persons," M. G. Ross and I. M. Biggi report that the traditional vocational rehabilitation model appeared to be responding to and affects white clients in predictable and consistent ways, while its impact on nonwhite clients is consistently different. (CB)

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3 • Innovative Approaches and Research in Addressing the Needs of Nonwhite Disabled Persons

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Abstract

This article examines counseling approaches and research needs regarding service delivery to nonwhite persons with disabilities. Counselors must adjust their attitudes, responses, and goals regarding minority and nonwhite disabled clients based on their individual uniqueness. As concluded in Kolk's study (1977) of counselors' physiological responses to disabled and minority clients, additional research is needed in this area. Rehabilitation personnel must become aware of the deficiency-oriented research on minorities. Finally, some specific recommendations are outlined with regards to the rehabilitation of nonwhite females and the examination of assessment instruments.

We often attempt to explain behavior that we do not understand and many times do not accept. Such has been the case with societal problems and issues such as rape, college protests, suicide, disability, and homosexuality. This is also the case with racial minorities, a societal issue that affects every strand of American life. Yet, despite a few isolated cases, massive unified efforts to clarify and eliminate problems focused on race/ racism appear to be declining and in some areas almost nonexistent.

Since the early 1970's in rehabilitation, there has also been a trend toward less attention focused directly on the complexity of issues concerning research and delivery of rehabilitation services to minorities. Even though there appears to be a more recent resurgence of interest and writing related to counseling and minorities, a systematic and comprehensive approach to research and innovative strategies regarding disabled minorities continues to be elusive. Although worthwhile projects related to disabled minorities have been accomplished, much more needs to be accomplished. Therefore, the purpose of this paper is to explore some of the critical issues related to counseling approaches and research needs regarding service provision to nonwhites who are disabled.

APPROACHES AND RESEARCH

Each racial minority person enters the rehabilitation process/program with his/her own beliefs, attitudes, values, and goals.

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Although some generalities may be postulated, individuals will not always behave according to these generalities. Thus, the information shared is to provide basic references which must be transmitted into useful specific knowledge for effective service delivery. There is no cookbook for providing services to minorities. "Helping relationships do not allow a rigid structure" (Henderson, 1979, p. 492). Yet, there are at least three major responsibilities for anyone who conducts research and counsels minorities. First, the "counselor should try to promote optimal personal and intellectual growth of the . . . client" (Henderson, 1979). Second, the counselor and researcher need to create a physically and psychologically safe environment for interaction to occur. Third, the rehabilitationist needs to be aware of cultural differences existing for minority clients.

In addition to these responsibilities, three assumptions warrant careful consideration for all researchers and counselors of minorities:

(a) Racism is operative in our society,
(b) Minorities are not treated equally to their majority peers, and
(c) We are all a part of the problem and the solution.

Typical emotions aroused by these assumptions include anger, fear, guilt, defensiveness, interest, disinterest, empathy, and commitment (verbal and action). Nevertheless, minorities are or will be a part of your case loads, and if viable solutions to some of the larger problems associated with race are not resolved, we are all losers.

The emotional and cognitive acceptance of racism requires increased awareness of the negative ramifications of a racist environment. No one can deny that fundamental injustices have been committed against persons in America for the irrelevant reason of race. Yet, the past needs to be behind us. The tragedy can only continue if we do not benefit from past failures. Viable alternatives can and must be found, but solutions will not develop out of a void.

By virtue of its philosophy and specialization in serving the disabled, rehabilitation is an excellent program to help disabled nonwhites transform potential into self-fulfilling roles (Atkins, 1980).

The goals of rehabilitation counseling reflect an awareness of individual uniqueness and that all persons have a human right to set their own priorities. To categorize all disabled minorities into one group reflects isolation and segregation which impedes the rehabilitation process. Thus, counselors, researchers, and administrators must examine their views of nonwhites who are disabled.

For example, the interesting idea of phantom counselor and client was introduced by Schumacher (1973). Usually the counselor and client have had a type of interaction before they meet physically. Records, previous agency contacts, referral information, etc., produce this phantom. This concept has a number of implications for both client and counselor and can often shape the relationship before it has an objective time to develop. The counselor and counselee can bring positive or negative attitudes to their first encounter. When majority counselors are dealing with minority disabled persons, negative attitudes often overshadow the positive. Educators and supervisors can caution students and staff about this type of contact, plus provide suggestions which can benefit both counselor and client.

Issues that tend to arise during counseling with the disabled minority client often include language, counseling goals, and client specific problems. The use by counselors of slang phrases and in-group terms that are not common to their communication style is fraught with danger. It is better that counselors ask questions when they do not understand and that they not allow communication differences to deter them from the client's concerns.

The success of the nonwhite disabled client is a function of the overall rehabilitation counseling process and not just the counseling experiences. Goals should be selected with client involvement to insure cooperation and the desired success.

Atkins (1980) and Schumacher (1973) believed that counseling disabled minorities involves the same ingredients as with the disabled majority but the client's condition, the agency, and the counselor impose special considerations for working with minority individuals.

In an article by Kolk (1977), it was pointed out that little attention has been paid to the physiological responses counselors experience when working with various disabled and minority clients. Investigations in this area have tended to point out discrepancies

between self-reported comfort and physiological comfort. Kolk's study was undertaken to try and answer such questions as: Will counselors experience high stress in relation to various disabled and minority clients? Will counselors' self-reported comfort with clients be consistent with measured physiological stress? Will minority (Black, Puerto Rican) counselors, because of their similarity with clients who have been stigmatized and labeled as different, experience stress to a lesser degree than white counselors with disabled and minority clients? Will females and males differ in their physiological responses to various clients?

Suggested counselor-client interactions were presented to graduate student counselors in training with the result that physiological arousal in the form of stress was found to occur in relation to five disabled and one minority client. It was learned that stress toward each client category occurred far beyond those found in the general interview situation. Kolk felt that his research supported the notion that the counselors' physiology does change as various clients are encountered.

It should be noted that stress was found within minority counseling students even though they verbalized relative comfort. It was not learned whether this discrepancy was due to a social desirability factor or lack of awareness by the students. Several factors may account for high stress on the part of minority students toward minority clients. First, added pressure may be felt by the student counselor because she/he and the client are members of a minority group. Second, responses may not be to the client per se, but to the context in which the client is found. A third factor for consideration is that minority counselors may identify themselves or feel the client identified them with the majority system, and consequently, the minority counselor is not free of stress in relating to a minority client.

The need for clarification and understanding in reference to black counselor stress with black clients is noted. Because so many (Atkins & Wright, 1980; Dean, Parker & Williams, 1977; Ford & Ford, 1978; McFadden, 1976) have advocated the use of minority counselors with minority clients, knowledge concerning stress may be very helpful. If it could be learned what factors produce stress for black counselors in working with black clients, strategies could be implemented to produce reductions in stress if it is felt to be a hindrance to service delivery and personal comfort for the client and/or counselor.

The conclusion from Kolk's study should not be made that all counseling students or counselors experience stress toward all disabled and minority clients. It could be concluded that additional studies are needed to determine individual differences in physiological responses to clients, that research in "real" settings would be valuable, and that differences and/or similarities between students and practicing rehabilitation counselors could facilitate our knowledge. Also, physiological response awareness to clients could be included as a component of inservice education for practitioners and within rehabilitation counselor education courses.

Rehabilitation educators, counselors, administrators, etc., need to be aware of the negative attitudes that may be fostered by research findings. Rehabilitation personnel must strive to interpret and utilize research results within a positive context. So much of the research done to *help* minority persons has only lead to more stereotyping and lack of access to mainstream America. Rehabilitation and other helping professions must always be on guard against improper use of research findings.

Smith (1977) pointed out that blacks have become the most researched minority group. Still, a great amount of this research *has not* led to a better understanding of how to counsel blacks, provide adequate rehabilitation services, and reduce stereotypes. "In an effort to sensitize others to the situations of members of a particular racial group, we sometimes ignore individual differences—defeating in part the very goals we set out to accomplish" (Smith, 1977, p. 390). Smith cautioned us that some investigators are not necessarily motivated by "good" intentions. Rehabilitation personnel must be aware of this as they review the literature on what has been written about nonwhite disabled clients.

Very often counseling research on minorities has been deficiency-oriented with studies usually stressing negative aspects. Often black clients are described as hostile, angry, or alienated both with themselves and the counselor. It is felt that this stereotypic presentation of blacks paves the way for stereotypic treatment. Smith said that "the recognition of cultural differences in the coun-

seling of blacks is one thing, but the stereotyping of these differences is quite another" (p. 391). Stereotyping has led to a portrait of a black client as a "deficient white client."

Numerous aspects of the literature on minorities are currently being questioned. Some researches have started to pose questions about the pervasive idea of negative self concepts of black individuals. Another area receiving attention in the form of questions is the myth of the non-verbal minority client. There is a difference between recognizing that a person refuses to talk for some reason and labeling him/her non-verbal. There is a difference between recognizing that people vary in their language style and trying to group them together according to their socioeconomic status and race.

It is encouraging to find that the counseling literature is reflecting concern with issues involving the minority female. Rehabilitation counseling has a tremendous task ahead in this area.

Counselors need to understand the frame of reference and establish trust with the disabled nonwhite female. "Those techniques used in traditional counseling settings that accentuate the importance of the individual can be useful" (Copeland, 1977, p. 400). An approach that places emphasis on strengths is desirable for counseling nonwhite females. This approach is not new to the rehabilitation educator or counselor. Throughout the literature, emphasis is placed on abilities not disabilities.

Much more emphasis needs to be given to the underrepresentation of black females in those careers that are nontraditional and in higher education. For the minority disabled woman, at least three factors must be confronted—race, sex, and disability. Such factors as the nature of the disability, aspirations, expectancies and social consequence are felt to be important to educational and career outcomes for the minority disabled female. Needed are strategies which can facilitate the entrance of black females into higher education and/or nontraditional careers. What is learned about the black nondisabled female can be utilized to better service those who are disabled.

Standardized tests are usually an important part of the assessment of clients within rehabilitation. The controversy over why minorities tend to show low performance on these tests has been explored by many (Anastasi, 1976; Vontress, 1971).

The concern is that nonwhite disabled persons' abilities are assessed, not just their inabilities. Rehabilitation counselors need to be aware of the limitations and strengths of the instruments they select. Adequate test-taking orientation and preliminary practice can benefit nonwhite disabled clients. Harmon, Sharma, and Trotter (1976) pointed out that the use of vocational inventories for clients from various cultural and experiential backgrounds has received little research attention. Yet, the use of these inventories within rehabilitation with nonwhites is often routine. The counselor must exercise caution in administering to nonwhites instruments designed for and standardized on the dominant white culture.

A case can be made for both the continuation and the discontinuation of the use of standardized tests with blacks within rehabilitation. Since it is felt, however, that this type of assessment will continue to be utilized within rehabilitation, a few suggestions seem appropriate:

1. Know as much about the client, the instrument, and the examiner as possible before scheduling testing.
2. The reading level of the client should be determined before selection of a test.
3. Use individual vs. group tests whenever possible.
4. Discuss the why and how of the test with the black client.
5. Seek the active participation of the examinee. Ask about their previous testing experiences, etc.

SPECIFIC RECOMMENDATIONS

The aforementioned approaches and research represent only limited concerns regarding nonwhite disabled persons. Similarly, the following specific recommendations are not exhaustive. Yet, it is felt that these recommendations can assist rehabilitation personnel as they work with nonwhite clients.

1. Competent rehabilitation personnel must be educated in cross-cultural counseling and research. Education needs to reflect an assertive, positive, and objective approach to learning.
2. A national policy and implementation plan, research and evaluation pro-

gram is essential. This program must be long-term and continuing.

3. All rehabilitation personnel must develop a sincere commitment to help advance the rights of disabled nonwhites.
4. Outstanding and exemplary rehabilitation programs and practices serving disabled minorities need to be researched and shared.
5. The most valuable resource available for assisting nonwhites in rehabilitation is the minority individual him/herself. Meaningful dialogue must be developed with potential and current consumers to obtain their views of their needs and their suggestions for improved delivery systems.
6. Teamwork is essential in developing strategies and methods for service provision to minority clients. Teamwork can assure the pooling of resources for the "good" of the consumer.
7. Self-help groups provide an excellent resource for use with minority clients. These groups provide, among other things, a sense of belonging and shared concerns, a method for self-expression, a way to assist others, and a way to learn from the experience of others.
8. The system of "networking" has a viable role in providing services to nonwhites. The linkage of the client to the needed system may be one of the most valuable services a rehabilitation worker may provide.
9. Realistic appraisal and use of such groups as the church, family, volunteer organizations, and political organizations have much to offer when assisting nonwhites.
10. Meaningful professional training programs can be another vehicle for increasing the participation of minorities in rehabilitation.
11. Public rehabilitation legislation should be used to ensure that resources are more directly provided to cross-cultural clients.
12. Self-advocacy, assertiveness training, and political astuteness need to be taught consistently to minority consumers.
13. The mass media must be educated and employed to advance the positive aspects of disabled minority experiences and culture.
14. Some of the basic questions that must be asked of minority persons which will begin to serve as a knowledge base for future planning include:
    a. What reasons do minorities give for not seeking rehabilitation services?
    b. What are the experiences (positive and/or negative) of nonwhites who do seek rehabilitation services?
    c. What do minority persons view as barriers to the availability, accessibility, acceptability, and adequacy of rehabilitation services?
15. Cross-culturally skilled rehabilitation personnel (CCSRP) must be able to generate appropriate and cross-culturally realistic options with their minority clients.
16. Knowledge and understanding of human rights, of cultural and rehabilitation politics, and of legal issues are required of CCSRP.
17. Assertiveness in casefinding of minority consumers is required. CCSRP must be willing to enter nonwhite communities in order to ensure adequate casefinding.
18. Individual differences among minority consumers must be assessed and respected.
19. Sincere and consistent recruitment programs must be developed and implemented to ensure that appropriate numbers of nonwhites are not only employed but retained and promoted in rehabilitation practice and education.
20. CCSRP must support and participate in research which explores minority issues from a constructive stance.
21. A national institute for research on minorities would facilitate rehabilitation investigations regarding disabled nonwhites.

Summary

Numerous service delivery questions continue to exist regarding disabled nonwhites. Rehabilitation research is an excellent vehicle for generating answers. Basic and applied research is warranted:

a. Who are minority disabled consumers?
b. How do minorities view disability?
c. What is the state-of-the-art regarding research related to nonwhites?
d. What rehabilitation practices impact on success for minority disabled consumers?
e. How can rehabilitation best recruit and retain nonwhite professionals

A primary role of the National Institute of Handicapped Research (NIHR) is to prompt quality services to persons who are disabled (PWD). In keeping with the national emphasis on employment of PWD, research is needed to identify, clarify, and recommend needed implementation strategies to better ensure successful rehabilitation of minorities.

NIHR has placed priority on "a need to promote the widespread adoption of new, tested, and validated practices and exemplary programs resulting from rehabilitation research and training that will improve and generally enhance the service delivery system for disabled individuals" (p. 4). The needs are identical for nonwhite disabled persons.

Rehabilitation personnel are concerned about the rights of all people and must use resources so that human dignity is assured for all oppressed persons. Therefore, it is felt that a reactivitation of concern, interest, and research has excellent potential for improved service delivery to nonwhite disabled citizens.

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4 • The Role of Social Support in Disease Severity in Chronically Ill Black Patients

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Abstract

Social support has a direct positive effect on health status and serves as a buffer for the effects of psychosocial and physical stress on the mental and physical health of the individual. The purpose of this study was to investigate the relationship between social support and disease severity in chronically ill black patients with sickle cell disease and diabetes. It was hypothesized that social support would be significantly related to disease severity in black patients with sickle cell disease and diabetes such that high availability of social support would be associated with less disease severity. The subjects sampled included 45 adult patients with sickle cell disease and 69 adult patients with diabetes. All patients attended Howard University Hospital outpatient clinics. The variables examined were the availability of social support and disease severity as measured by patient interviews and a symptom check list. Study results indicated that social support was significantly associated with disease severity in black patients with sickle cell disease and diabetes. However, a divergent pattern of relationships between social support and severity variables were found for the two groups. Clinical applications for the utility of the social support variable in treating patients with chronic illnesses are discussed.

The role of social support on mental and physical health status has been investigated in a number of studies. Social support has been found to have a direct positive effect on health status and to serve as a buffer of the effects of psychosocial and physical stress on the mental and physical health of the individual (Broadhead et al., 1983). The purpose of this study was to investigate the relationship between social support and disease severity in chronically ill black patients with sickle cell disease and diabetes.

Social support provides the information that tells a person that he or she is loved, valued, and part of a network of communication and mutual obligation (Cobb, 1976). This support may be emotional, cognitive, or instrumental (Caplan, 1979; Cobb, 1976). It is likely to be a combination of these. Emotional support provides love, reassurance, and a source of strength and hope. Cognitive support provides a source of information. Information processing may become impaired, particularly during periods of physical and emotional stress. Social support not only helps to reduce the anxiety that interferes with cognitive functioning but helps to provide alternative information. Instrumental support may be in the form of material aid and concrete assistance. Someone who is part of an emotional network is also likely to be cared for and helped materially.

For the person with a chronic illness, social support is especially important. A chronic illness may be defined as an altered state of health that cannot be cured by a simple surgical procedure or a short course of medical therapy (Miller, 1983). There are three general features of a chronic illness: a) the symptoms interfere with many normal activities and routines, b) the medical regimen is limited in its effectiveness, and c) treatment, although intended to relieve the symptoms and long range effects of disease, contributes substantially to the disruptions of usual patterns of living (Reif, 1975). Episodes of illness are often unpredictable and recurrent. The individual must cope with the per-

sonal meaning of having a chronic illness as well as living with the daily demands of health related care. Each crisis, physical or psychological, causes additional stress for individuals with chronic illnesses. Social support is very important.

Social support is especially an important variable to consider with black persons with chronic illnesses. Family, friends, church, and community play an important role in adjustment to mental and physical stress. Pearson (1984) advocates an ecological approach to treating black patients using family, friends, church, and community as resources to aid in treating the patient.

The study of social support and its relationship to disease severity in this population is important for two reasons. Very little research has been done using a sample of black patients with diabetes and none has been done using a sample of patients with sickle cell disease. Disease severity as a health status variable is of particular importance since it is likely to have a direct effect on adjustment to and coping with the illness.

The following hypothesis was tested. Social support will be significantly related to disease severity in black patients with sickle cell disease and diabetes such that high availability of social support will be associated with less disease severity.

METHOD

Study Samples

The sickle cell sample consisted of 45 patients attending the Howard University Center for Sickle Cell Disease. The mean age of these patients was 28. The sample consisted of 28 females and 17 males. Sickle cell disease is a genetic disorder of the red blood cells (Scott & Kessler, 1977). Upon deoxygenation, the defect causes the cells to assume a crescent shape. The aggregation of sickle cells which temporarily block small blood vessels causes pain. When severe enough, the pain is referred to as a painful crisis. Painful crises occur throughout the life of the patient in an unpredictable fashion. There may be other complications of the disease including infection and organ failure. This disease affects primarily those of African descent in this country and occurs in about one out of every 500 black Americans.

The diabetic sample consisted of 69 patients attending the diabetic out-patient clinic at Howard University Hospital. With the exception of two patients, all had maturity (adult) onset of diabetes. The mean age of these patients was 57. There were 37 females and 23 males. Diabetes is a disease caused by the body's failure to make use of certain foods in the proper way. (American Diabetic Association Fact Sheet, 1983). Diabetes develops because the body does not produce enough insulin or the body cannot make use of the insulin that is produced. The body is not able to use food properly and high levels of glucose accumulate in the blood and urine. Serious complications including blindness and kidney failure may follow. Diabetes occurs in about one child in 1,000 under age 10 and in about one adult in 50 over age 50 (Whitehouse, 1979). Diabetes strikes women and nonwhites more often than other Americans (American Diabetic Association Fact Sheet, 1983).

The two study samples were different in many respects. Sickle cell disease is a genetic disorder present at birth. While there is a genetic factor in the development of diabetes, the disease does not occur until a later age. Patients with sickle cell disease experience recurrent painful crises. Although there may be medical complications of diabetes, extreme pain does not occur to the degree that it does in patients with sickle cell disease.

Both diseases are chronic with recurring illness symptoms. Both are incurable. Regular medical management is necessary in order to minimize symptoms and complications. Frequently, psychological and social support may be needed to assist the patient in coping with the illness.

Demographically, the two study samples were different. Sickle cell patients were younger, better educated, and had slightly higher household incomes. The majority of the patients with sickle cell disease had high school diplomas, whereas the majority of the patients with diabetes did not.

INSTRUMENTS

Social Support

The social support scale was developed by Wilcox (1982) and is used to determine the frequency of supportive and helpful behaviors performed by others. The scale

measures the availability of emotional, cognitive, and instrumental support. Respondents are asked to indicate how available each type of help is by circling frequently available, sometimes available, or rarely available. Examples of scale items include someone who will listen to you carefully and talk over problems with you and someone who will lend you their car for a few hours. The reliability of this scale is acceptable and the validity is being established.

Measures of Disease Severity

The measures of disease severity were both perceptual and behavioral. Patients were asked about the severity of their illness and about medical treatment for their illness.

Perception of Severity of Disease—This scale was devised for use in this study and is used to determine the patient's perceptions of the severity of his or her disease in terms of medical consequences. Subjects were asked to respond to items on a 7-point scale ranging from *strongly agree* to *strongly disagree*. Reliability coefficients of the scales using Cronbach alpha (a measure of internal consistency) were .94 for the sickle cell sample and .84 for the diabetic sample.

Perception of Interference of Disease—This scale was developed for use in this study. These scale items were used to determine the degree to which patients perceived that their disease interfered with routine activities. Subjects were asked to respond to statements on a 7-point scale ranging from *interferes greatly* to *does not interfere at all*. Reliability coefficients (Cronbach alpha) of the scales were .85 for the sickle cell sample and .70 for the diabetic sample.

Symptom Checklist—This is a list of symptoms associated with the disease and was devised for use in this study. Subjects were asked to indicate the degree to which the following symptoms are a problem by responding to a 4-point scale ranging from *not a problem* to *a very serious problem*. The symptom checklist was different for the two groups. For the sample with sickle cell disease, the symptom checklist included the following: a) weakness and sluggishness; b) jaundice; c) irritability; d) nausea, vomiting; e) depression; f) excessive pain; g) swelling of hands and feet; h) poor eating, loss of appetite; and i) anxiety. The symptom checklist for the sample with diabetes included the following: a) sweating; b) excessive thirst; c) irritability; d) frequent urination; e) depression (feeling low, sad, moody, etc.); f) abdominal pain; g) skin rash; h) change in eating habits; i) anxiety; and j) problems with feet.

Acute Medical Treatment—Responses to these questions help determine the frequency of acute medical treatment. Subjects were asked to answer the following questions: 1) approximately how many times have you been hospitalized for sickle cell (diabetic) related problems? 2) Approximately how many times over the past two years have you gone to the emergency room for sickle cell (diabetic) related problems? Sickle cell patients were asked how many crises they had per year. Diabetic patients were asked how many episodes they had per year. (These episodes refer to hyperglycemic and hypoglycemic reactions where the blood sugar levels are above and below normal).

Procedure

Subjects were approached at their clinics while they waited to see a medical person. Their cooperation in participating in a study of the health care needs of patients was enlisted. They were asked to give their honest responses and confidentiality was assured. Interviewers assisted patients in completing questionnaires when necessary.

RESULTS

Composite measures were computed on all scale items. Pearson correlation coefficients were computed between the measure of social support and the following variables: a) perception of severity of disease, b) perception of interference of disease, c) symptom checklist, d) number of acute medical treatments, i.e. number of hospitalizations and emergency room visits, and e) number of crises (episodes).

Sickle Cell Sample

Social support was moderately but significantly associated with the number of hospitalizations ($r = .26$, $p < .05$), the number of emergency room visits ($r = .36$, $p < .01$), and the number of crises per year ($r = .32$, $p < .02$). High availability of social support was associated with fewer hospitalizations, fewer emergency room visits, and fewer

crises. Social support was not associated with the perception of disease severity, perception of interference of disease, or reported symptoms.

Diabetic Sample

Social support was significantly associated with the perception of disease severity ($r = .27$, $p < .01$), the perception of interference of the disease ($r = .22$, $p < .05$), and the number of symptoms ($r = .31$, $p < .01$). High availability of social support was associated with a less severe perception of disease, the perception that the disease did not cause as much interference with daily life, and fewer symptoms. Social support was not associated with number of hospitalizations, number of emergency room visits, or number of episodes per year.

DISCUSSION

The results of this study indicate that social support is associated with disease severity in black patients with sickle cell disease and diabetes. These moderate but significant relationships point to the importance of this variable in understanding the health needs of patients with sickle cell disease and diabetes.

A divergent pattern of relationships between social support and severity variables were found for patients with sickle cell disease and diabetes. Social support was more likely to be associated with behavioral outcomes, i.e. hospitalizations, emergency room visits, and crises for patients with sickle cell disease. High availability of social support was associated with fewer hospitalizations, emergency room visits, and crises. Social support was likely to be associated with perceptual variables for patients with diabetes. Patients with low availability of social support were more likely to report that they experienced more symptoms. This group perceived that their disease was severe and that the disease interfered with routine activities. It may be that these divergent patterns of relationships can partially be attributed to medical and demographic differences between the two samples.

Overall, patients with diabetes reported fewer hospitalizations or visits to the emergency room relative to patients with sickle cell disease. The responses of patients with diabetes also showed less variability compared to the responses of patients with sickle cell disease. The majority of the patients with diabetes reported none or only one emergency room visit or hospitalization for diabetic problems; sickle cell patients reported a range of one to more than ten hospitalizations and emergency room visits.

A similar response pattern emerged for the question about number of crises (episodes) per year. The majority of the patients with diabetes experienced no episodes (hypoglycemic/hyperglycemic reactions) during the specified time period. The responses from patients with sickle cell disease were more varied with reports of none to more than ten crises per year.

Patients with diabetes had a significant association between social support and the perception of the degree to which the disease interferes as well as perception of disease severity and symptoms. This association did not occur for patients in the other sample. The diabetic patients were much older (mean age was 57 versus 28). Social support may be especially important when considering severity variables in older patients. Elderly patients, especially those with a chronic illness, are more likely to need assistance. The availability of social support is more likely to directly benefit elderly patients than younger patients. For example, social support enables the elderly patient to engage in routine activities.

The divergent pattern of relationships between social support and disease severity variables of these two samples highlights the importance of a nonmonolithic approach for research with black populations. While severity variables were associated with social support for both groups, the nature of these relationships differed for the illnesses. The results of this study also point to the importance of using multidimensional measures when doing research. Behavioral and perceptional measures were used in this study.

Implications for Rehabilitation

The findings of this study are limited to black patients with sickle cell disease and diabetes. The role of social support in the health status of patients with other chronic illnesses and other ethnic groups is an area for further investigation. The findings from this study are applicable not only to the medical treatment process but to the total reha-

bilitative process. The perception of disease severity can be expected to be related to success or failure in rehabilitation efforts. Those individuals who feel that their disease is very serious and limiting will benefit less from rehabilitative services than those with less severe perceptions of their disability. In this context, social support can be thought of as a mediating variable affecting the relationship between the perception of disease severity and rehabilitative success.

Social support is also directly related to rehabilitative success (see papers by Miller and Wilson cited here). Those providing treatment and services to chronically ill or disabled black individuals must take into consideration social support systems and the availability of social support. When social support systems do not exist or are limited, directing the person to social support groups such as self-help programs and other community-based programs may be desirable.

SOCIAL SUPPORT AND SEVERITY OF DISEASE VARIABLE CORRELATES IN CHRONICALLY ILL BLACK PATIENTS

Variables	Sickle Cell	Diabetes
Perception of Severity of Disease	.15 p <.20	.27 p <.01
Perception of Interference of Disease	N.S.	.22 p <.01
Symptoms Checklist	N.S.	.31 p <.01
Number of times hospitalized over past two years	.26 p <.05	N.S.
Number of emergency room visits over past two years	.36 p <.01	N.S.
Number of crises (episodes) per year	.32 p <.02	N.S.
	N=47	N=63

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5 • Patients' Perceptions of Their Adjustment to Disability and Social Support in a Community-Based Teaching Hospital

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Abstract

This study was designed to determine if patients with family support and social work support adjust better to disability than patients without family support and social work support. Instruments were administered to the one hundred (100) black medical clinic patients participating in the study. The instruments included a) the Moors Family Environment Scale (which measures family support), b) the Handicap Problems Inventory (a measure of adjustment to disability), and c) the Brody Disability Score (which measures the level of the patient's disability). The instrument also contained demographic information as well as items measuring social work support. The results indicated that the social and family life areas of the Handicap Problems Inventory were significantly associated with the cohesion and expressiveness sub-scales of the Moors Family Environment Scale. The implications of the findings with respect to assisting the disabled in adjusting to their disability are discussed.

Society's negative attitudes toward deformity and disability have been a source of long standing concern among the disabled in America. Since modern medical science is responsible for people living longer, the possibility of disability faces an ever increasing number of Americans. Even though the needs and concerns of the disabled are receiving more attention at the federal, state, and local levels, changes in the political, economic, residential, educational, and health status of the disabled are made through legislative action and advocacy by the disabled and non-disabled.

It has been documented that disabled blacks experience even greater difficulty than disabled whites (Atkins, 1979). Socioeconomic and sociocultural factors such as low income level and racism further compound adjustment to disability.

Illness and physical disability are manifested to a greater degree among blacks than in the general population (Gary, 1982; Strauss, 1965). For example, the incidence of kidney disease and diabetes mellitus are more prevalent among blacks than among

whites. Black America also experiences a higher percentage of persons with elevated blood pressure as compared to the general population. The illnesses and disabling conditions cited above have contributed to noticeable differences in the death rate in the black community.

Counseling is critical to the treatment of patients diagnosed with hypertension, diabetes mellitus, and seizure disorders. This service is particularly important for the person's adjustment in all life areas. Negative attitudes and influences, both inside and outside of the disabled patient's community, strain the lives of the patient's family. The difficulties can only be handled by professional assistance geared towards maximizing one's ability to cope and function under such overwhelming circumstances (Johnson, 1962; Kaplan, 1967).

Broadening the definition of disability to include the disability diagnoses responsible for crippling the black community is an issue to be addressed. Expanding the definition could improve employment opportunities and eligibility requirements for benefits presently denied this group (Saad, 1969).

The purpose of this study was to investigate the relationship between 1) adjustment to disability and family support, 2) adjustment to disability and social work support, and 3) adjustment to disability and level of disability.

SUBJECTS

One hundred patients receiving medical services at Norfolk Community Hospital were identified for the sample. Subjects were selected via a proportionate, stratified random sample generated from the daily admissions list of the hospital. The sample was composed of males and females of various ages and marital status. It is important to note that sample size for the study was subject to realistic reduction in number because of the number of daily admissions to the hospital of patients fitting into the specific disability category.

DATA COLLECTION

Data were collected from the Norfolk Community Hospital. The Director of Admissions, the Director of Social Services, and two graduate students assisted the researcher with the data collection process.

The instrument consisted of three standardized scales. They were: the Handicap Problems Inventory (HPI), which is designed to assess the perception of adjustment to disability in personal, family, social, and vocational areas; the Family Environment Scale (FES), which was designed to tap the patients' perception of the significance of family support; and the Functional Disability Score (FDS), which was obtained in order to identify and categorize the level of disability. Additional demographic data were collected by means of a form developed by the researcher. All instruments were administered as soon as possible after admission, since the diagnosis may have limited whether administration could take place on the first or second day. The researcher reported to the Admissions Office and Social Service Department each day in order to include those patients admitted to the hospital and scheduled for early discharge.

All necessary provisions for confidentiality and protection of patients' rights were the same as those required by hospital policy.

SAMPLE

Descriptive statistics, i.e., frequencies, percentages, and measures of central tendencies were computed on all demographic variables. Sixty-four black female disabled patients and 36 black male disabled patients were included in the sample for the study. Sixty-seven percent of the patients were diagnosed as having hypertension. Thirty percent of the patients had primary diagnosis of diabetes mellitus and 3% of the patients had seizures disorders. Patients diagnosed with diabetes mellitus and seizure disorder may have had secondary diagnoses of hypertension.

The functional disability scores indicated that 93% of the sample population were moderately disabled, 4% of the patients were seriously disabled, and 3% were severely disabled.

Ages of the patients ranged from 16 to 83 with an average age of 53. Seventy-three percent of the patients had income levels of less than $3,000 per year. Three percent of the patients reported incomes in the $10,000 and above category. Forty-six percent of the

patients had less than an eighth grade education, 10% of the patients were high school graduates, and only 1% of the patients had attended college.

All of the 100 patients were receiving medical services from the hospital. Seven people received services from the occupational therapy department, and one diabetic patient reported in the "other" category designating services from the dental clinic, the nutrition department, and informal services from the clinic secretary (transportation, assistance with the hospital's system, etc.). Seventy-eight of the participants needed no mechanical or human assistance, though many in this group identified the need for and cost of medication as a concern. Six patients, however, required shoe braces, nine individuals used canes, five had walkers, and two required the use of hospital beds at home.

Of the sample, 36% reported that they lived alone, 8% lived with parents, 13% with nonrelatives (friends, fiance, etc.), 13% lived with their children, and 10% lived with their spouse. Twenty percent of the subjects selected the "other" category designating other family members (aunts, uncles, cousins, godparents), facilities (boarding houses, rooming houses).

Sixty-six percent of the participants reported having an eligibility worker at a nearby community social services agency. The patients saw the worker at least once a year for a re-evaluation of their need for financial assistance, medical assistance, and food stamp services. None of the subjects reported receiving casework, group work, or family services from the community social service agencies. Four people did report using homemaker service and six people reported having home health service.

Sixty-seven percent of the subjects stated that no family member accompanied them to the clinic. Eighty-four percent of the patients reported that their relatives do not express concern about their diagnosis or medical needs. Eighty-eight percent of the subjects stated that no member of the family accompanied them to scheduled re-evaluation appointments with the eligibility worker to discuss concerns about medication costs, clinic transportation cost, stress of disability on family, etc.

The Handicapped Problems Inventory was used to measure adjustment to disability There are four subscales which measure adjustment in personal, family, social, and vocational areas of the patient's life. The mean scores on the personal, family, social, and vocational subscales were 77.0, 79.5, 73.6, and 48.3 respectively. The higher the score, the less adjusted were patients in these life areas.

The FES was employed to measure family support. The three subscales of cohesion, expressiveness, and conflict were used to measure the relationship dimensions of the family social environment. The mean scores for cohesion, expressiveness, and conflict were 69.4, 69.6, and 66.8 respectively. The mean scores for all three categories were high, yet not signicantly different from each other.

Social worker support was obtained by asking the patients questions pertaining to his or her perception of social work support. For the most part, patients did not receive social worker intervention except when an evaluation was done for Medicaid delineation.

DISCUSSION

The results of this study indicate that expressiveness as a measure of family support was significantly related to adjustment to disability as measured by the family and social life areas of the HPI. An expressive family environment was related to more problems in the area of family life. On the other hand, an expressive family environment was associated with fewer problems in the area of social life. This finding is consistent with the finding that scores for cohesion and conflict on the FES were both high. The patients participating in the study identified their ability to openly express themselves as being encouraged by their family members. During the interviews, it was a common response for patients to identify specific disagreements, concerns, problems, and conflicts faced by them and their family members caused by the disabling situation. In spite of these concerns and difficulties (e.g. financial, fears, myths, confrontations), the patients felt that their family members were still supportive as they faced their hostile environment. Contacts with family members, even when limited, were verbalized as a positive and stable supportive force in the patient's life. These types of

contacts and interactions affect the disabled person's adjustment to his or her disability.

The *Pearson Correlation Coefficients* were computed between the four areas comprising the HPI and the subscales comprising the FES (See Table I).

The family life area of the HPI was significantly related to the expressiveness scale of the FES with high scores on the measure of expressiveness. The measure of social life areas of the HPI was negatively related to the expressiveness measure of the FES.

The family life area of the HPI was significantly correlated with the cohesiveness subscale of the FES in the negative direction ($r = -.32$ DL.051). High scores in the family and social life areas of the HPI were associated with low scores on the measure of cohesion.

Social work support was not significantly related to adjustment to disability in any of the four areas of the HPI. Level of disability was also not related to adjustment to disability. Cohesion as a measure of social support was also significantly related to the family and social life areas of the HPI. Low family cohesiveness was associated with a less favorable adjustment to disability. These measures of family support, i.e., expressiveness and cohesion point to the importance of understanding these variables when assisting persons in adjusting to their disability.

A significant relationship between perceived adjustment to disability in all life areas and social work intervention was not found. The patients did identify having annual evaluations regarding their financial status. However, the patients and their family members did not participate in any case work or group work services. There was no identified work with families or intervention on their behalf with health professionals. Consequently, the missing service is still considered valuable though statistical significance is impossible to achieve with no member of the sample receiving comprehensive intervention from a social worker.

It is important to note that no statistically significant relationship was found between the level of disability and adjustment to disability. However, the categories of level of disability were small since 94% of the patients fell into the moderately disabled category. The patients were active in the medical treatment program and medications were identified as essential in helping them to physically function and to participate in daily living activities.

It is important to mention that patients had low adjustment scores in all areas except vocational adjustment. This vocational adjustment score is attributed to the patients' perception that employment was difficult, if not impossible, to obtain. Consequently, the patients regarded other opportunities (e.g. yard work, odd jobs, babysitting, church work) in the employment or vocational adjustment category. Additionally, the medical clinic staff felt that current vocational programs found their patients ineligible for services and training opportunities because of prescribed disability definition and the nature of the symptoms experienced by the patients (Smith, 1978).

TABLE 1

PEARSON CORRELATION COEFFICIENTS

	HPI-Personal	HPI-Family	HPI-Social	HPI-Vocation	FES-Cohesion	FES-Expressiveness	FES-Conflict
HPI-Personal	1	0	0	0	−0.1628	−0.1815	0.0131
HPI-Family			0	0	−0.2078*	0.2618*	−0.0522
HPI-Social				0	−0.3235*	−0.1979*	−0.0378
HPI-Vocational					−0.0618	−0.1857	−0.0581

NOTE: P = <.05

RECOMMENDATIONS

Further studies are needed in order to identify the specific concerns preventing successful adjustment to disability among black disabled persons. Additional information to ascertain the extent of the available services to this group by rehabilitation and health agencies needs to be identified. Current rehabilitation and health agencies should maximize the opportunities of the black disabled currently receiving services by identifying gaps that might prevent the patient's chances of being a more productive member of society.

The training of health professionals should include sensitizing society to the unique concerns and the situations of the black community. This is especially necessary since the disabled population needs more active advocates to influence those who make policies affecting the disabled population's plight.

The investigator recommends that similar studies like the one presented here be replicated in other agencies and facilities. It is suggested that additional comparison groups be used. For example, the responses from black and white disabled groups could reveal important information as they compare and contrast their disabling situation.

While this study addressed disabled adults, it is especially important to recognize the high number of disabled children and youth who require the professional services of health/rehabilitation workers and who also suffer from the negative social attitudes in regards to deformity and disability.

The training of more social work practitioners in all areas of social work practice is felt to be essential. Training in family intervention and the use of family as resources are recommended.

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6 • Frequency and Distribution of Disabilities Among Blacks: Preliminary Findings

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Abstract

The present study was designed to identify and assess the frequency, distribution, and impact of various disabilities among black Americans. Twenty-seven (27) agencies—8 state and 19 private—from the following targeted cities comprised the sample: Washington, DC; Atlanta, GA; New York, NY; Gary, IN; Los Angeles, CA; Little Rock, AR; Detroit, MI; and Jackson, MS. The research findings clearly substantiate evidence of some unique features of the status of black disabled individuals. Selected disabilities analyzed, using cross tabulations and chi-square statistics, suggest significant clusters of black clients only as the comparison relates to the distribution of blacks in the larger population of the designated areas. When analyzed across ethnic groups, the percentages of these disabilities for whites exceed those for blacks by 200% and sometimes 300%. Also, when the contrast is based on ethnic group membership across all regions, only sickle cell anemia is significantly more prevalent among blacks, and there is greater variability with regard to the incidence of disability and ethnicity-based regional distribution. Other findings relative to earnings and mental retardation, together with the delivery of services to blacks, call attention to the need for further investigation and for remediation.

BACKGROUND

While it is true that handicapped individuals who are members of racial and ethnic minorities suffer the same indignities as other handicapped individuals, there are special and unique problems that these individuals face because of the lack of awareness of their cultural differences (Stedman, 1977). In addition, prejudice and racial discrimination continue to exclude a great number of minorities (particularly blacks) from full participation in all aspects of society (Stedman, 1977; Bowe, 1983; Walker et al., 1984).

The problem of black handicapped individuals is indeed complex. Not only do blacks have to live with excessive economic burden, but education is frequently not available to them. As a result, they have fewer opportunities for education and for earning decent incomes. Moreover, access to their homes, stores, schools, transportation, and the general community facilities can only be achieved through the use of extreme measures and often with the involvement of at least another person (Miller, 1984).

Merton Gilliam (1981) gives firsthand examples of prejudices he has experienced as a double minority (i.e. being black and handicapped). Gilliam said he grew up in the black ghetto of Cincinnati during the Depression and was constantly subjected to pressures and criticism in public schools. In his quest for employment, he suffered humiliation and

rejection. "Nobody wanted to hire a guy on crutches; employers claimed that they would have insurance problems," he tells us.

During his college years, Gilliam observed that, of the 80 disabled students who were sponsored by rehabilitation or other programs, blacks received the least services:

> Public transportation was not available to the physically handicapped who used wheelchairs and crutches, and the cost of special transportation was excessive. The few facilities that are available to the handicapped are frequently set apart so that the individual has to be treated as a special case.

Clearly, the need for research which responds to the needs of minority populations with handicapping conditions has been substantiated. Evidence that minority populations (blacks in particular), have unique handicapping problems and have been inadequately served in rehabilitation programs is overwhelming (National Institute of Handicapped Research, 1981).

However, no comprehensive research has been conducted to indicate the number of handicapped individuals within the black population and to identify these unique needs. It is essential that research strategies be implemented which begin to address problems and issues specific to the successful rehabilitation of disabled minorities.

METHODOLOGY

Purpose

This study, along with two other research investigations, was designed to establish empirical research as a means of identifying and assessing the frequency, distribution, and impact of various disabilities among black Americans. The emphasis here is the identification and delineation of significant clusters relative to the rehabilitation status and needs of blacks as compared to other ethnic groups within eight select geographic areas of the United States.

The profile and results embodied in this research report cover only the initial elements of the study. More comprehensive reports will be given subsequently.

Description of Participating Agencies

Initiated during the 1983-84 project year of the "Howard University Model to Improve Rehabilitation Services for Minority Populations with Handicapping Conditions," this study examined disability distribution in a selected sample. Table I contains a profile of the 27 agencies comprising this selected sample based on predetermined research sites which constitute regional representation. The following cities were the targeted sites: Washington, DC; Atlanta, GA; New York, NY; Gary, IN; Los Angeles, CA; Little Rock, AR; Detroit, MI; and Jackson, MS. The rationale for this selection is that a substantial number of blacks reside in these cities. It should be noted that the sample population represents agencies and clients within the larger metropolitan areas within up to a one-hundred-mile radius.

See Table II for ethnic population distribution in the respective metropolitan areas (these figures were taken from the 1980 Population Census).

Data were collected during the period January to October 1984 via a survey format through the utilization of a two-part questionnaire which included three appendices. The questionnaire was mailed out to respondents. Eight public and 19 private agencies participated in this study. The total client population was approximately 282,000, which constitutes 87% for state agencies and 13% for private agencies. This statistic reflects some duplication since many public agencies often contract out clients to private agencies after evaluation. The ethnic composition of the sample is 36% black, 56% white, and 8% for other ethnic groups.

General Design and Analysis

The research instrument consisted of a two-part, twenty-four item questionnaire developed and validated through the cooperation of rehabilitation professionals from the following groups: the project's National Advisory Committee, the Local Task Force (which consists of representatives from agencies in the District of Columbia metropolitan area), and the Research Committee of the Council of State Administrators of Vocational Rehabilitation.

Types of Analyses

Part I of the questionnaire generated descriptive information on agencies surveyed, including staffing and types of services provided. These descriptive character-

TABLE I

AVERAGE CASELOAD OF AGENCIES PARTICIPATING IN NATIONAL SURVEY

LOCATION	PRIVATE PARENT ORGANIZATION	NO. OF COUNSELORS	NO. OF CLIENTS	AVG. CASELOAD
Arkansas	Department of Human Services	132	3345	93
California	Human Resources Center	4	700	100
California	Parent Auxiliary	1	15	17
California	Parent Auxiliary	1	50	50
California	Parent Auxiliary	8	55	6
California	State of California	635	93589	148
District of Columbia	Department of Human Services	69	13507	200
Georgia	Department of Human Services	3	199	30
Georgia	Department of Human Services	82	12144	148
Indiana	———	148	22644	153
Michigan	League—Goodwill	3	434	15
Michigan	League—Goodwill	217	16381	96
Michigan	League—Goodwill	635	93589	148
Michigan	Michigan Rehab. Services	16	844	67
Michigan	Michigan Rehab. Services	20	144	80
Michigan	Michigan Rehab. Services	47	3941	111
Michigan	Jewish Volunteer Services	4	345	25
Michigan	Jewish Volunteer Services	7	167	19
Mississippi	Department of Human Services	86	24203	281
New York	Assoc. for Chn. W/Ret. M/Dev.	30	1000	20
New York	Department of Education	—	74725	—
New York	Federation of Jewish Phil.	22	1015	25
New York	Federation of Jewish Phil.	29	435	15
New York	Vera Ins. of Justice, Inc.	6	153	20
New York	Health & Hospital Services	—	—	—

TABLE II

ETHNIC DISTRIBUTION IN THE TARGETED AREAS ACCORDING TO THE 1980 POPULATION CENSUS

CITIES	BLACKS NO.	%	WHITES NO.	%	TOTALS
Atlanta, GA	498,826	24.5	1,508,640	74.3	2,029,710
Detroit, MI	890,532	20.45	3,376,800	77.5	4,353,413
Gary, IN	126,350	19.65	491,274	76.4	642,781
Jackson, MS	126,202	39.3	192,547	60.0	320,425
Little Rock, AR	82,865	21.0	306,058	77.7	393,774
Los Angeles, CA	943,968	12.6	5,073,617	67.8	7,477,503
New York, NY	1,940,628	21.27	6,117,497	67.07	9,126,346
Washington, DC Metro Area (SMSA)	853,719	27.8	2,072,934	67.7	3,060,922

* Census Bureau
Suitland, MD
763-5002

istics were examined across state and private agencies with cross-tabulations. Part II of the research instrument facilitated the collection and analysis of the following types of data: a) the frequency of various types of disabilities and b) a comparison of client earning levels at referral and closure. Utilization was also made of a chi-square statistical measure in the anaylsis of data.

Research Questions

1. With reference to the descriptive characteristics of the sample surveyed, (a) how many clients were served in the respective agencies for Fiscal Year 1983, and what was the average caseload per counselor? (b) what types of services were provided? (c) what was/were the principal source(s) of funding?
2. What is the ethnic breakdown of the sample populations?
3. Of the 18 identified disability groups, which ones, if any, are significantly more prevalent among blacks than among whites?
4. Are there significant differences, based on ethnicity, with respect to these 10 selected disabilities?
   - Blindness
   - Diabetes
   - Orthopedic Impairment
   - Sickle Cell Anemia
   - Amputee
   - Epilepsy
   - Substance Abuse
   - Cardiovascular Diseases
   - Mental Retardation
   - Visual Impairment
5. What percentage of the total sample constitutes mental retardation for all ethnic groups in both private and public agencies?
6. Is there a relationship between disability and ethnicity with respect to regions?
7. What is the level of earnings of clients at referral and closure by ethnicity?
8. Given the five regions:
   West: California
   Midwest: Michigan, Indiana
   Mid-Atlantic: Washington, DC
   Northeast: New York
   South: Georgia, Mississippi, Arkansas
   where are the most significant clusters in the 10 major disabilities for nonwhites located?

Results

An analysis of Part I of the survey instrument yielded descriptive characteristics of the sample (including staff personnel, clients served, types of services provided) which are as follows:

1. Eight public and 19 private agencies showed a grand total of over 1,660 counselors (not including New York State) and 282,000 clients served during the 1983 fiscal year. Of these, the public agencies account for 70% of the counselors and 87% of the clients served. Table I gives a more detailed breakdown of these variables and their respective frequencies. Much of the data from New York State and Harlem Hospital are currently being further analyzed; therefore, all of the findings are not fully reported. The remaining data will be included in a subsequent report to be given at a later date.
2. State agencies located in larger, more highly populated states carry proportionately larger clientele. Examples are, the State of California with approximately 94,000; New York State, 74,725; Mississippi, 24,000; and Indiana, 23,000. Georgia and the District of Columbia also have relatively large clientele—some 12,000 and 13,500 respectively. (See Table I.)
3. With respect to average caseload per counselor, private agencies seem to have an advantage. For instance, private agencies have a grand mean of 48 clients per case worker. That is, over 300% fewer. It must be noted, however, that these 156 clients might constitute a spurious statistic, since state agencies often contract out services to private agencies so that clients are often included in state agency intake and after evaluation, they are then referred to private facilities for the provision of specific services such as training. Private agencies include organizations such as Goodwill Industries and the Association for Retarded Citizens.

Another variable was the primary source of funding for the respective agencies. These represent three principal types: state-federal matchings, state-supported and private contributions. As might be expected, all eight public agencies fell under the category of

state-federal matchings. For the private agencies, there is a great deal of overlap since many of these agencies get their financing from combined sources. For instance, as many as 56% of the agencies reported support from state-federal matchings. Yet, many of these are also represented in the 33% financed by private contributions and also in the 39% receiving contributions from sources other than the three mentioned above. (See Table III.)

A detailed examination was also made with respect to the types of agencies serving disabled populations in the targeted areas as well as the services offered. Tables IV and V contain an overview of these data. Pre-eminent among the types of agencies are vocational, vocational rehabilitation, educational, social service, mental health, private and non-private residential and nonresidential, non-profit and independent living centers. The types most frequent in our sample are vocational (12%), vocational rehabilitation (23%), educational (6%), non-profit (12%), and private (9%). (See Table IV.)

The data reflect the delivery of a wide range of services. The following are among the most frequent types of services provided by the participating agencies: medical diagnosis and treatment, psychological diagnosis and treatment, psychiatric diagnosis and treatment, vocational and educational counseling, peer counseling, academic reinforcement, vocational assessment, occupational and physiotherapy, job training and placement. A large number of agencies also provide vocational assessment (i.e. 21 agencies, or 78%, offer this type of service). Consistent with this, there are a similarly large number of agencies offering job training; for example, 70% of our sample offer this service and 56% provide job placement. With reference to vocational education and counseling, another 56% offer academic reinforcement (see Table V for further breakdown.)

In Section II (of the research instrument), selected disabilities analyzed by ethnic groups reveal some interesting contrasts. Of the 18 disability categories listed in the survey questionnaire, the categories with the largest number of clients were "other" totaling 20,844 (this category includes clients with multiple handicaps) and "mental retardation" totaling 18,114. Of the mentally retarded clients, 14,727 were served by state agencies and 3,831 were served in private agencies. (Mental retardation represents clients clearly identified as mentally retarded—approximately 13% of the sample population. Nevertheless, it must be stated that it is likely many of the clients identified under the "other" category may also be mentally retarded, since this category includes the multiply handicapped.) The data show that 6,989 of the 14,727 mentally retarded clients (48%) in the public agencies were black. Similarly, 1,919 of 3,836 mentally retarded clients (50%) in the private agencies were black (See Table VI). A similar pattern was shown for whites. Mental retardation was 48% and 41% respectively for state and private agencies.

Other major disabilities showing significant clusters for nonwhite groups in public agencies are blindness (32%), sickle cell anemia (95%), orthopedic impairment (25%), substance abuse (30%), and cardiovascular disease (30%). Amputee, diabetes and epilepsy also represent proportionate clusters for blacks and other minorities. It should be noted, however, that while each of the disabilities cited is significantly high among blacks, sickle cell anemia is the only one which has a lower rate of manifestation among white clients in the sample. In response to research question 3, of the 18 disability groups selected for the sample, only sickle cell anemia is more prevalent among blacks than among whites when the comparison is based on ethnic group membership across all regions. However, the data bears out a positive answer to research question 4, since the significant differences in the prevalence of disability do exist based on ethnicity.

With respect to the most significant clusters in the 10 major disability groups across state and private agencies, in response to research question 4 (Is there a relationship between disability and ethnicity with respect to region?), the following results were observed: Table VI indicates that sickle cell anemia, mental retardation and cardiovascular disease all have significant clusters across state and private agencies. Blindness, diabetes, amputee and substance abuse (all in the 30 to 30+ percentage range) suggest significant clusters also. This, however, is reflective of the distribution of blacks in the sample population which is 36%. All of the other disabilities named in research

TABLE III

I YPE AND SOURCE OF SUPPORT FOR AGENCIES PARTICIPATING IN NATIONAL SURVEY

TYPES OF AGENCIES	FEDERAL/STATE MATCHING		STATE SUPPORTED		PRIVATE CONTRIBUTIONS		OTHER	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
State = 8	28	100						
Other = 19	10	56	6	33	6	33	7	39

TABLE IV

PROFILE OF SAMPLE AGENCY CATEGORIES

TYPE OF AGENCY	AGENCIES					
	STATE AGENCIES		PRIVATE AGENCIES		OTHER	
	Number	Percent	Number	Percent	Number	Percent
Correctional	0	0	0	0	0	0
Educational	0	0	6	100.0	6	6.7
Government	4	80.0	1	20.0	5	5.6
Hospital	1	100.0	0	0	1	1.0
Independent Living Center	1	20.0	4	80.0	5	5.6
Mental Health	0	0	5	100.0	5	5.6
Non-Private	1	50.0	1	50.0	2	2.2
Non-Profit	0	0	0	0	0	0
Non-Residential	1	25.0	3	75.0	4	4.5
Private	0	0	9	100.0	9	10.1
Profit	0	0	0	0	0	0
Residential	1	20.0	4	80.0	5	5.6
Social Service	0	0	6	100.0	6	6.7
Vocational	1	16.7	5	83.3	6	6.7
Vocational Rehabilitation	7	30.4	16	69.6	23	26.0
Total	18		71		89	100.00

TABLE V

SUMMARY OF TYPES OF SERVICES OFFERED BY SAMPLE AGENCIES

TYPE OF SERVICES	AGENCIES					
	STATE AGENCIES		PRIVATE AGENCIES		OTHER	
	Number	Percent	Number	Percent	Number	Percent
Academic Reinforcement	4	27	11	73	15	6
Independent Living	5	36	9	67	14	6
Job Placement	6	40	9	60	15	6
Job Training/Ret	7	37	12	63	19	8
Medical Diagnosis	6	55	5	45	11	5
Medical Treatment	6	67	3	33	9	4
Occupational Therapy	5	50	5	50	10	4
Peer Counseling	3	33	6	67	9	4
Physical Therapy	5	63	3	37	8	3
Psychiatric Diagnosis	6	60	4	40	10	4
Psychiatric Treatment	6	46	7	54	13	5
Psychology Diagnosis	6	43	8	57	14	6
Psychology Treatment	6	46	7	54	13	5
Recreation Facilities	5	45	6	55	11	5
Social Work	1	10	9	90	10	4
Transportation	6	43	8	57	14	6
Other	2	40	3	60	5	2

question 2 are also proportionately significant (see Table VI).

It is important to note, however, that these percentages constitute significant proportions only as they relate to the distribution of blacks in the sample and in the larger population of the designated areas. When analyzed across ethnic groups, the percentages of these disabilities for whites are two and sometimes three times the proportion for blacks. Examples of these phenomena are reflected in the fact that among the blind, 32% were black and 56% were white. Likewise, of the substance abuse clients, 30% were black and 61% were white. Another example of these comparisons is the fact that in public agencies epilepsy was 28% among blacks and 64% among whites. (See Table VI for review of these data.)

While this pattern of concentration of black handicapped clients seem to be characteristic of the sample for most regions (West, Midwest, and Northeast), for most of the disability clusters reported above, there are several exceptions however. The chi-square statistical procedure showed a significant relationship (above and beyond the .01 level) between disability and ethnicity with respect to the regions from which the sample was drawn (see Table VII). The pattern of disability in relationship to the clients' ethnicity was less consistent for the Southern and Mid-Atlantic regions than for the other three regions.

An examination of Table VII for the West, Midwest, and Northeast regions, reveals similar ratios of the incidence of visual impairment, amputee, and epilepsy between blacks and whites to those found in Table VI for the overall sample. However, there is greater variability with regard to the incidence of disability and ethnicity based on regional distribution. For example, mental retardation in the Southern region is reported as 69% among blacks as compared to 28% among whites (whereas it was reported as about equally distributed within the overall sample for both public and private agencies). Visual impairment is reported as being about three times as high among blacks in the Mid-Atlantic and Southern regions. This pattern was reversed in the overall sample. Likewise, substance abuse is reported to be 70% among blacks as compared to 23% among whites in the Midwest. The Mid-Atlantic region reported overwhelmingly high proportions for blacks for each of the disability categories.

With reference to the economic status of clients at referral, the data indicate that generally, as the income levels increase, the percentage of blacks in the respective categories decreases. Further, some 32,410 of the 109,142 (or 30%) of clients with no earnings are black (see Table VIII). With respect to earnings of clients at closure, the data show some marginal decrease across all ethnic groups (except blacks) in the no income category. The percentage of blacks in this category went up by 2%. However, there is a significant upward trend in the percentages at the higher income levels for black clients. For instance, in the less than $50 per week category, the percentage of blacks dropped from 29% at referral to a mere 5% at closure, while in the $200 + category, the percentage rose from 12% to 15%. (See Tables VIII and IX for these comparisons.)

DISCUSSION

The study clearly has substantiated further evidence of some unique features of the status of black disabled individuals. Indeed, there are important findings that call attention to further examination and perhaps remediation.

The current study provides an overview of the types and level of rehabilitation services in eight metropolitan areas throughout the United States. The findings include a profile of eight public and 27 private agencies. It also provides comparisons of the distribution and frequency of disability among the sample population. An analysis of 1980 census data reveal the incidence of disability among blacks in the general population to be almost twice as high among blacks as it is among whites—14% as compared to 8% (Bowe, 1983). However, the breakdown of disability among the clients in the current study in the majority of the categories identified for the study, with the exception of mental retardation (which was almost evenly distributed) and sickle cell anemia (which was found almost exclusively among blacks), was reported at levels two or three times higher among whites than blacks. It was noted, nevertheless, that a large number of blacks were identified under the other categories which included multiple handicaps. The distribution of various disabilities by

TABLE VI

NUMBER AND PERCENT OF CLIENTS FOR SELECTED DISABILITIES BY ETHNIC GROUPS

DISABILITY	STATE AGENCIES								TOTAL	PRIVATE AGENCIES								TOTAL
	BLACK		WHITE		HISPANIC		OTHER			BLACK		WHITE		HISPANIC		OTHER		
	N	%	N	%	N	%	N	%		N	%	N	%	N	%	N	%	
Amputee	539	33	919	57	89	6	65	4	1612	93	44	100	49	2	1	14	7	209
Blindness	1273	32	2201	56	216	6	248	6	3936	234	35	281	42	-	-	158	23	673
Cardiovascular	1302	36	2022	57	106	3	152	4	3582	234	46	214	42	23	5	34	7	505
Cerebral Palsy	249	26	647	68	36	4	17	2	949	33	31	63	60	5	5	4	4	105
Diabetes	394	33	708	59	61	5	47	4	1210	62	44	70	49	2	1	8	6	142
Digestive Disorders	615	36	1054	61	38	2	25	1	1732	67	52	59	45	1	1	3	2	130
Epilepsy	560	28	1285	64	126	6	45	2	2016	111	41	146	54	8	3	5	2	210
Hearing Impairment	1018	20	3398	67	313	6	330	7	5059	227	33	362	53	25	4	68	10	682
Learning Disabilities	598	26	1437	63	216	10	26	1	2277	188	37	308	69	16	3	1	-	513
Mental Illness	3160	22	10038	70	685	5	393	3	14276	402	18	1494	66	214	10	142	6	2242
Mental Retardation	6989	48	7035	48	384	3	319	2	14727	1919	50	1558	41	215	5	144	4	3835
Orthopedic Impairment	5143	25	13617	67	1196	6	524	3	20480	706	43	779	49	35	2	89	6	1629
Respiratory Conditions	264	35	433	57	36	5	33	4	766	30	30	54	55	4	4	11	11	99
Sickle Cell Anemia	238	92	10	4	-	-	10	4	258	43	90	-	-	-	-	5	10	48
Speech Impairment	158	33	258	54	52	11	10	2	478	23	31	45	61	3	4	3	4	74
Substance Abuse	3278	30	6559	61	739	7	201	2	10777	371	35	667	62	1	0	31	3	1070
Visual Impairment	246	24	618	61	111	11	36	4	1011	60	25	158	67	9	4	9	4	236
Other	9499	55	5738	33	474	3	1683	10	17398	1413	43	1513	49	9	3	158	5	3095

TABLE VII

SIGNIFICANT CLUSTERS IN THE MAJOR DISABILITY GROUPS ACROSS REGIONS
(STATE AGENCIES ONLY)

DISABILITY		WEST: CALIFORNIA				MIDWEST: INDIANA				MID-ATLANTIC: DC				NORTHEAST: NEW YORK				SOUTH: GA, ARK., MISS.			
		B	W	H	O	B	W	H	O	B	W	H	O	B	W	H	O	B	W	H	O
Blindness		321	1043	197	48	82	82	9	1	238	31	5	30	26	68	—	2	608	161	5	168
	%	20	65	12	3	47	47	5	1	78	10	2	10	27	71	—	2	64	18	1	18
Visual Impairment		40	124	105	10	2	9	3	—	69	5	2	12	20	121	—	2	165	359	1	11
	%	14	44	38	4	14	64	21	—	78	6	2	14	14	85	—	1	31	67		2
Ortho. Impairment		1006	4225	1165	222	100	96	12	—	745	29	19	123	936	4722	—	52	2356	4545	—	127
	%	15	64	18	3	48	46	6	—	81	3	2	13	16	83	—	9	34	65	—	2
Amputee		62	197	84	22	9	14	3	0	79	2	2	11	97	299	—	13	292	406	—	19
	%	17	54	23	6	35	54	12	—	84	2	2	12	24	73	—	3	40	57	—	3
Substance Abuse		641	1872	734	43	39	13	3	0	986	80	8	89	591	1397	—	19	1021	3197	5	50
	%	20	57	22	1	70	23	6	—	85	7	6	8	29	70	—	1	24	75	.1	1
Mental Retardation		486	995	365	31	51	36	5	—	624	55	10	67	1371	4063	—	41	4687	1886	4	180
	%	26	53	19	2	55	39	5	—	83	7	1	9	25	74	—	1	69	28	.5	5
Sickle Cell Anemia		50	1	—	1	9	1	—	—	40	1	—	4	55	8	—	0	84	—	—	6
	%	96	2	—	2	90	10	—	—	89	2	—	9	87	13	—	—	93	—	—	7
Cardiovascular		171	439	106	30	14	13	0	1	360	4	5	81	193	679	—	3	564	88	—	51
	%	23	59	14	4	40	46	—	4	80	.8	.1	18	22	78	—	.3	38	60	—	3
Epilepsy		88	317	126	15	19	16	—	—	52	6	3	15	132	641	—	5	209	305	—	5
	%	16	58	20	3	54	46	—	—	68	8	4	20	17	82	—	1	40	58	—	2
Diabetes		54	167	58	9	6	9	—	—	108	2	3	24	72	319	—	2	154	213	—	12

TABLE VIII

EARNING STATUS OF CLIENTS AT REFERRAL BY ETHNIC GROUP
ACROSS STATE AND PRIVATE AGENCIES

MEAN WEEKLY INCOME	BLACK	%	WHITE	%	HISPANIC	%	OTHER	%	TOTAL
No Earnings	32410	30	69351	64	4215	4	3166	3	109142
Less than $50	316	29	724	65	37	3	32	3	1109
$50–$99	472	26	1288	70	35	2	52	3	1847
$100–$120	358	38	541	57	29	3	17	2	945
$151–$199	146	22	496	74	10	2	19	3	671
$200 +	281	12	2115	87	40	2	3	1	2439

TABLE IX

EARNINGS STATUS AT CLOSURE BY ETHNIC GROUPS
ACROSS STATE AND PRIVATE AGENCIES

MEAN INCOME WEEKLY	BLACK	%	WHITE	%	HISPANIC	%	OTHER	%	TOTAL
No Earnings	6378	32	12183	62	731	4	410	2	19702
Less than $50	639	5	12419	94	16	.1	23	.2	13097
$50–$99	618	25	1722	71	75	3	26	1	2441
$100–$125	423	3	872	62	80	6	25	2	1400
$126–$150	1535	30	3322	65	199	4	57	1	5113
$151–$199	748	22	2378	71	188	6	39	1	3353
$200 +	1016	15	4745	71	406	6	523	8	6690

ethnicity was similar for public and private agencies. On the other hand, there was a great range of variability with regard to the distribution of disability and regional representation. Much higher proportions of visual impairment (64% blacks versus 18% whites) and mental retardation (69% blacks versus 28% whites) were reported in the Southern region. These findings suggest the need for regional planning related to the delivery of services. It should be noted that Bowe (1983) reported that 50% of the black disabled reside in the Southern area of the United States.

At both levels—state and private—the percentage of whites receiving services was twice and sometimes three times as many as blacks, and this is viewed against the fact that the percentage of blacks and whites in the sample is 36% and 56% respectively. A review of the results suggests that within each of the regions surveyed, a wide array of supportive services exist, yet the proportion of black clients enrolled is lower than would be expected by chance.

The findings of the current study are consistent with those of Robinson (1979). He reported a high proportion of mentally retarded clients within the rehabilitation service system. The single disability category in the current sample in which both blacks and whites were closely matched with regard to proportion for incidence of disability is mental retardation. (This is true within both the public and private agencies.)

Further research into the possible causes, and a more comprehensive analysis of all related data, will help to suggest ways and means of addressing the imbalances. One possible cause is the fact that blacks may not be seeking out and taking full advantage of available facilities.

Another finding that suggests implications which warrant further examination is the fact that even after the rehabilitation process, a disproportionately large number of blacks still remain in the lower income groups, with only marginal increases in the number of clients as the income categories move to higher levels. Because income is usually tied to levels of educational attainment and socio-economic status, it seems quite obvious that the academic and technical skills of the black client population need to be up-graded.

Findings from the current study are consistent with those of Atkins (1980) since she also found that blacks seemed to benefit to a lesser degree than whites as a result of going through the rehabilitation process. It must be emphasized here that the current study is part of a larger study; therefore, these data must be interpreted in that light. Two major implications from the current analysis are the need for a) a close examination of regional variations and b) linkages and communication among various service agencies, community organizations, and educational facilities.

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7 • Critical Vocational Rehabilitation Service Delivery Issues at Referral (02) and Closure (08, 26, 28, 30) in Serving Select Disabled Persons

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Abstract

This pilot study revealed that the traditional vocational rehabilitation (VR) model appeared to be responding to and impacting on white clients in predictable and consistent ways; its impact on nonwhite clients was consistently different from that of white clients. The more salient findings were as follows: (1) the rank order referral pattern for the top five referral sources showed that "Self" was the primary referral source for *all* clients and that the top five referral sources remained the same for 1982 and 1983 for white clients while that for nonwhites shifted for referral sources occupying positions 2-5 between 1982 and 1983. The shift in rank order of referral sources demonstrated an increasing impact of educational institutions and social security and public sources on nonwhites "entering" the VR system; (2) on "exiting" the system, "refused services" was the primary reason for closure in 1982 and 1983 for white clients while "failure to cooperate" more often predominated as the primary reason for closure for nonwhite clients in 1982 and 1983; and (3) the data revealed that whites made up a greater proportion of Status 26, or competitive closures, in 1983 while nonwhites received a higher proportional representation than whites among those closed in non-rehabilitated closures (Statuses 28 and 30). This pilot study was effective in heightening the agency's awareness of a number of issues regarding outreach and VR outcomes for nonwhite clients.

BACKGROUND

It has been generally accepted that nonwhite disabled individuals have not had equal access to vocational rehabilitation services. This mirrors the exclusion of nonwhites in many aspects of the dominant American culture. On the other hand, the lack of equal access is attributable to the adverse impact of strongly held cultural values of minority populations. In either case unequal access to vocational rehabilitation services portends the need to assess the nature of the problem. We need to ask: What is the nature of nonwhite access to the vocational rehabilitation service delivery system, and what is the nature of placements and/or outcomes for this select group of vocational rehabilitation clients?

Traditionally, it has been assumed that as the vocational rehabilitation program was designed for the disabled, it was sufficient to meet the needs of all of the disabled. However, experience has taught us that programs and systems developed for the normative and/or dominant culture do not necessarily meet the needs of minority disabled persons. There is growing evidence that while minority disabled persons have problems which are similar to those of the dominant culture, the problems they face may differ both in scope and in magnitude. For example, as a result of a five-year landmark study on the readiness of the severely handicapped to use vocational rehabilitation services on leaving high school which was conducted by the New York State Office of Vocational Rehabilitation (NYS/OVR) in collaboration with the New York City School Board (1968), Neff and his associates concluded that "the ethnic and socio-economic

status of the children (and of their families) were very important determiners of both progress and outcome" and that "prevocational service appears to be least effective when the handicapped child is also faced by all the manifold problems of the subculture." In a similiar manner, Cohen & Hodges (1963) pointed out that the poor are relatively helpless and impotent in manipulating the institutions of society to fulfill their needs and are generally convinced that they are unable to influence the workings of society. This statement is equally true of the disabled generally and of the minority disabled particularly.

In short, though significant progress has been made in the passage of legislation to improve the status and protect the rights of nonwhite disabled persons and in improving services to nonwhites, many problems in service access by and service provision to nonwhites remain.

Our review and analysis of the literature descriptive of the nonwhite population within New York State and nationally shows that within New York State approximately 7.7% of all working age residents are disabled. Of that number, "... black males represent 15.7% of all disabled males in the state of working age while black females comprise 21.0% of all disabled females between the age of 16 and 64. One in eleven or 8.9% of all disabled working age New Yorkers is of Hispanic origin" (Bowe, 1984). Thus, these two minority groups alone would comprise 45.6% of the total disabled population in New York State.

As of December 1983, the NYS/OVR was providing services to the disabled population in the following proportions: 76% white, 13% black, and 9% Hispanic. The active caseload in August 1984 consisted of 79% white, 19% black, less than 0.5% Indian/Alaskan native and 19% other. The apparent discrepancy between the percentage of nonwhite disabled persons in New York State and the percentage of these persons being served by NYS/OVR, indicates the need for a greater effort by the New York Vocational Rehabilitation agency to reach out to nonwhite populations within the state. For example, on the national level, Frank Bowe (1984) has shown that "disability is markedly more common among blacks (adults) than it is among whites or Hispanics." Bowe further points out that of working age blacks, just over 14% are disabled while the disability rates for Hispanic and white adult disabled are similar at 8.9%. At the same time, a review of census and NYS/OVR data, while utilizing the same parameters as used in the Bowe study, has demonstrated that there are significant differences in referral and closure trends for nonwhites and Caucasians.

While some 45% of the working aged disabled in need of services in New York are nonwhite, the percentage of nonwhite service providers within the NYS/OVR is less than one-tenth of one percent of the total number of VR counselors. To wit, New York State is faced with a significant gap in its ratio of nonwhite potential clients to nonwhite service providers. There is some evidence that private sector providers may have a slightly better ratio; however, the overall effect has been inadequate outreach to nonwhites and a consequent lower yield in successful vocational rehabilitation outcomes. In essence, the traditional vocational rehabilitation model falls short in responding to the needs of and enhancing rehabilitation of nonwhites for a number of reasons, among which are inadequate and/or inappropriate outreach, lack of involvement of nonwhites in the governance structure of the service delivery system, differences in value systems, a lack of awareness and sophistication on the part of nonwhites about accessing the system, and a lack of nonwhite advocacy groups (Simon, 1981).

PURPOSE

In order to address the questions of how minority disabled were accessing and faring in the vocational rehabilitation service delivery system, the NYS/OVR conducted a pilot study of a selected group of minority disabled persons. The central thrust of the study was focused on two key points in the vocational rehabilitation process, "entering" and "exiting" the vocational rehabilitation system.

The purposes of the study undertaken were:

—to establish baseline data for planning increased participation of nonwhites in the vocational rehabilitation program

—to explore reasons for closure in statuses 08, 26, 28, and 30 for nonwhites in New York State

—to explore how nonwhite disabled persons access and exit the vocational rehabilitation system in New York state
—to identify barriers to service delivery for nonwhite disabled clients, and
—to determine level of satisfaction with the service delivery system for nonwhites in NYS/OVR.

The study was comprised of two data samples. The first was drawn from a stratified random sample mail survey of former vocational rehabilitation clients and a second was drawn from the NYS/OVR data base management information system.

METHODOLOGY I

Sample:

During 1983 NYS/OVR participated in a (CSAVR) endorsed project involving an (RSA) awarded contract to Lawrence Johnson & Associates, Inc. (LJA) to "Evaluate the Delivery of Services to Select Disabled People by the Vocational Rehabilitation Service System."

As part of the research effort, LJA staff conducted site visits to eighteen state agencies for the purpose of interviewing State administrators/directors and selected counselors to obtain accurate information on each agency's service delivery system. A random sample of case records was reviewed on site (client confidentiality was maintained at all times).

A questionnaire was completed by NYS/OVR in order to provide a preliminary description of the agency system and clients served.

In addition, a client questionnaire was sent to a stratified randomly selected group of former OVR clients (client confidentiality maintained). The sample totalled 119 (white = 36, black = 32, Hispanic = 26, American Indian/Alaskan Native = 5, and Asian/Pacific Islanders = 20). Fifty-one percent of the sample consisted of status 26 closures, 24.4% were status 28 closures, and 20.5% were status 30 closures based on FFY 1982 agency data. These percentages were represented in each of the desired racial/ethnic mixes of the client population. Some respondent characteristics are as follows:

Handicaps indicated by respondents were identified in the following percentages:

4.3% Amputation
4.3% Deaf
4.3% Hearing
4.3% Learning Disability
8.7% Mental Retardation-Severe
13.0% Cardiac/Respiratory
13.0% Emotional
17.4% Mental Retardation-Mod/Mild
30.4% Orthopedic

The group which actually completed and returned the client questionnaire in New York State was:

6.9% American Indian/Alaskan
10.3% Asian/Pacific Islands
24.2% Hispanic
27.6% Black
31.0% White
34.5% Female
65.5% Male

Data Collection

NYS/OVR staff processed the surveys and forwarded them to LJA for analysis (grouped by size of vocational rehabilitation agency not by state) and at the same time initiated its own analysis of the data retrieved. Of the N = 119, 50 (42%) were returned and 69 (58%) were not returned. Of the 50 returned, 20 (58%) were completed and 21 (42%) were not deliverable. Most of the "undeliverables" occured because clients moved and had left no forwarding address.

Data Analysis

In-house analysis of the questionnaires was completed using the Human Service Dynamics Statsplus software and the Apple II+/E. The State Education Department's Burroughs mainframe computer was used to access data pertaining to competitive placement rates and wages of minority and majority rehabilitated clients. Since the latter run was recently reported for FY 1983, the results are presented under Methodology II.

The client questionnaire contained 24 questions which directly related to client characteristics and client satisfaction with the vocational rehabilitation service delivery system. Frequencies, crosstabs, chi-square, correlation, multiple correlation, and regression methods were applied to the data.

Results

Unfortunately, due to the extremely small sample involved in the survey data, significant findings were scarce. In many instances, however, it was apparent that if a larger sample were tapped, relationships and trends

would be more apparent. The data indicate client overall satisfaction with VR and the counseling received. Also, almost all respondents indicated that they would recommend VR to others. There was no apparent relationship between client race/ethnicity and satisfaction with VR counselors.

The following are key highlights which were gleaned from client responses to the questionnaire:

1. For both white and nonwhite the most frequent source of referral to NYS/OVR was from public service agencies, according to client responses.
2. White and nonwhite groups did not differ significantly regarding need for services which were not received.
3. There was very high correlation between rating of counseling received and overall satisfaction with vocational rehabilitation agency, regardless of client ethnic group. Those who completed training rated counseling positively, regardless of ethnicity.
4. Most respondents who completed the questionnaire item on "satisfaction with the provision of services that made it possible to find a job" rated the service as good.
5. Those with less than high school completion were more likely to be unemployed now. Most respondents had completed the 12th grade before starting VR services. The exception was Hispanics, who had completed grades 9-11. More whites than nonwhites had completed high school prior to starting vocational rehabilitation services.
6. Most clients rated their counselor's understanding of the client's problems in finding a job as very good to fair. Hispanics had more reponses in the poor to very poor range than any other group. Blacks never rated counselors below fair and usually rated counselors as very good.
7. Most whites and blacks did not indicate a need for services that they did not receive. Most Hispanics and American Indians indicated the need for services which they did not receive.
8. Specific services needed that were not provided, and which were suggested for how vocational rehabilitation could improve services, were training services. Counseling, medical, and placement services were mentioned less frequently than training as a perceived need by some clients.

Since the actual sample which completed the questionnaire was small, N=29, care must be taken not to view these findings as anything more than tentative and preliminary. If the sample were scaled up tenfold by chi-square analysis, statistical significance could be approached. Completion of the data analysis for the national study by Johnson & Associates, Inc., should provide a far more adequate basis for decision-making for improvement of the vocational rehabilitation service delivery system for select persons with disabilities.

METHODOLOGY II

Data Base Methodology

OVR has had to do "more with less" resources during the past several years. Funding for NYS/OVR has only increased by 20% between 1978 and 1982 during a period of 48% increase in cost of living, based on CPI (U.S. city average all urban consumers, U.S.A. all items). According to the NYS/OVR Annual Activity Report, rehabilitations in New York State have increased 12% for 1976-1983, and closures are down for the following: without service, 38%; not rehabilitated, 25%; and closed from applicant, 18%. However, new referrals are down 58% and new applicants are down 36% for 1976-1983. Total clients served are down 28%.

Clearly, equity issues (i.e., reaching adequate numbers of the target population which was 491,000 in FY 1981) remain problematic due to resource (funding) constraints. The percentage of nonwhites served has increased. However, frequent reasons for closure such as "failure to cooperate" and "refused services" may need further study since there is no explanation for what these terms really mean for a given client or group of clients.

The analysis in this section was conducted by utilizing NYS/OVR's data base. Notably missing from this data analysis is the Hispanic population of NYS/OVR's client cohort. This is due to the fact that the data entered for the Hispanic ethnic group is flawed. Presently, efforts are underway to pinpoint the problem so that these data will be available for analysis in the future.

Instrumentation

In-house Management Information System (MIS) records, annual reports, and special computer "runs" were examined in order to glean information pertaining to access to and egress from the NYS/OVR service delivery system by various ethnic groups. This effort focused on various entry and exit status reports for FY 1981 - FY 1983.

Data Collection

Most of the data are collected routinely by MIS from OVR District Offices. The data were organized and formatted by Bureau of Management Information (BMI) staff and by Bureau of Research and Innovation (BRI) staff. Client confidentiality was maintained at all times.

Data Analysis

Data were analyzed by BRI and BMI staff. Frequencies and percentages were used for this preliminary report. In the future, more extensive use of crosstabs and more powerful statistical procedures such as SPSS will enhance program evaluation capabilities.

Results

The following findings highlight entrance and exit trends for NYS/OVR clients between FY 1982 and FY 1983. Using OVR's data base, frequencies and percentages were calculated to determine "entering" and "exiting" patterns for nonwhite and white VR clients. Tables displaying these data follow the summary section of this report.

1. Placement rates for 26 closures for white clients increased by 2% while those for nonwhites decreased by 18%.
2. Rehabilitation rates for white clients increased by 4% while those for nonwhites decreased 4.5%.
3. Competitive placement rates for whites increased by a half of a percent while those for nonwhites increased by 2.5%.
4. When we looked at placed clients earning at or above minimum wage, we found that white placement rates declined 1.5% while such placements for nonwhites increased 11%.
5. The primary referral source across ethnic groups for 1982 and 1983 was individual or "self" referral.
6. The five most frequent sources of referral for all clients were 1) self, 2) health organizations and agencies, 3) educational institutions, 4) hospitals, and 5) social security and public sources. This order represented the rank order of referral sources for whites in both 1982 and 1983.
7. The most often cited reason for closure for the majority of white clients in fiscal years 1982 and 1983 was "refused services" (see Tables 6 and 7).
8. For nonwhites the top five referral sources shifted in order between 1982 and 1983 (see Table 8). The most frequently cited reason for closure for black clients was "failure to cooperate" (see Tables 6 and 7).
9. There was a higher tendency for the cases of white clients to be closed "rehabilitated" at or above minimum wage and for nonwhites to be closed non-rehabilitated.

DISCUSSION

This preliminary effort to assess the nature of nonwhite access to services and service outcomes has highlighted the need for further exploration of a number of parameters of the service delivery system in addition to the need to organize appropriate and accessible data bases in NYS/OVR so that equity and efficiency of vocational rehabilitation service delivery can be monitored in an ongoing fashion in order to meet the needs of nonwhite disabled clients.

Referral Sources

"Self referral" was the primary access route for *all* ethnic groups. However, the hierarchy of referral sources for whites remained unchanged in 1982 and 1983, while the hierarchy for nonwhite clients showed significant changes. This suggests that the traditional VR model is stable for white clients, but nonwhite clients may increase access to the VR system by emphasizing different referral sources.

Health organizations/agencies remained the second most common referral source for whites, and remained the least common referral source for nonwhites. Since utilization of health organizations/agencies would likely presume consistent because of gainful employment and geographic location in

white communities, such organizations do not produce many referrals of nonwhites. In addition, where these agencies are geographically located in nonwhite neighborhoods, the low number of referrals may suggest a lack of awareness of the potential benefits to clients offered by the VR system.

Social security/public sources moved in the hierarchy from fourth in 1982 to third in 1983 for nonwhite clients, while remaining the least frequent source for white clients. The actual disparity between whites and nonwhites in referrals from this source may reflect a greater awareness among white clients of the disincentives to participation in vocational rehabilitation vis-a-vis social security benefits.

An increase in the number of referrals from educational institutions raised this source to second place in the hierarchy for nonwhite clients. The factors which caused this increase may include the VR Jobs Training Partnership Act (JTPA) program and the strengthened connection between NYS/OVR and the Board of Cooperative Educational Services (BOCES) system.

CASE CLOSURE

There were two significant, possibly related, findings regarding case closure:

1. On the basis of Table 5, whites show a higher trend towards "closed rehabilitated," "closed in competitive employment," and "competitive employment at or above minimum wage" while nonwhites showed an elevated level of not-rehabilitated closures compared to rehabilitated or "successful" closures.
2. Among "unsuccessful" closures (Statuses 08, 28 and 30) for whites during 1982 and 1983 across all three states, the most common reason was "refused services," while for nonwhites the most common reasons were "failure to cooperate" and "unable to locate."

The possible connection between the above two findings is illustrated by the Asian/Pacific Islander ethnic group which experienced a drop in rehabilitation rate of 7.6% between 1982 and 1983. "Failure to cooperate," "handicap too severe," and "unable to locate" are commonly cited as reasons for the not-rehabilitated closures. One might suspect that these reasons for closure portend larger problems of communication due to linguistic barriers and cultural isolation characteristic of this population. It has been noted that the language barrier is reinforced through the closed society in which many Asian/Pacific Islanders function. The closed society hinders acculturation, economic advantage, and understanding of the vocational rehabilitation service delivery system. It fosters under-utilization of social service programs. As can be seen from Tables 1-4, while the placement rate, rehabilitation rate, and competitive placement rate were down for Asian/ Pacific Islanders, there was a sizable net gain (+11.3) for those Asian/Pacific Islanders who were competitively placed earning at or above the minimum wage. Though we suspect a relationship between educational level, cultural motivation, and job placement, the data collected did not lend itself to an explanation of this phenomenon.

Black Americans served by NYS/OVR exhibited a pattern of slight gain in placement rate (+.5%), rehabilitation rate (+3.2%), and competitive placement at or above minimum wage (+1.7%); however, they showed a net decline in competitive placement rate of (−1.4%). Consequently, while blacks gained in the number earning at least a minimum wage, their overall number of competitive placements declined slightly from 1982 to 1983, a factor which mirrors the decline of job placement for blacks generally. As the most frequent reason for black American Statuses 08, 28 and 30 closures cited in fiscal year 1983 was "failure to cooperate," "unable to locate," and "refused services" for these same statuses respectively in 1982, further analysis of case folders is necessary to determine the import of this shift which may or may not be related to psychological barriers. It seems, at least on the surface, to be contradictory to the fact that educational institutions ascended to second place as a referral source for black Americans in 1983 as one would anticipate those coming from educational institutions to have a greater awareness of the vocational rehabilitation process. At the same time, one must be cognizant of the fact that while education as a referral source for black Americans has moved up in the hierarchy of the top five referral sources in NYS/OVR for black Americans, social security and public service agencies along with concomitant disincentives moved upward in the hierar-

chy from fourth to third place. Thus, the relative gains which might have accrued from the upward movement of education as a referral source might have been offset by those for whom disincentives were great. A closer look in this area is certainly warranted.

The data showed a decline (−11.8%) in placement rates for American Indians and Alaskan Natives who finished services from 1982 to 1983, a maintenance of rehabilitation rates for Status 26 closures for this group, and an increase (+6.8%) in competitive placement rates; yet, this group experienced no relative gain in the percentage of clients competitively placed earning at or above the minimum wage, although there is sufficient data to suggest that college-educated Native Americans have little difficulty securing employment. The latter is reflective perhaps of the status of American Indian and Alaskan Natives in the general socio-economic structure. Native Americans have been isolated from the health and human service delivery system because of linguistic, educational, geographic, economic, and cultural barriers. In addition, there is general mistrust of the majority culture coupled with severe economic poverty due to high unemployment and limited opportunity for employment. Perhaps inherent in the lack of gain in competitive placement at or above the minimum wage for this ethnic group is the fact that the percentage of this population who finished services declined by 11.8% between 1982 and 1983. The increase in Status 26 closures for this group might reflect placements at less than minimum wage.

Despite the areas where the vocational rehabilitation service delivery system might have gaps in providing services to nonwhites, the data from former client surveys reveal an overall positive evaluation of the service delivery system, with a significant correlation between the evaluation of the counselor regardless of client ethnicity and the evaluation of the agency. Those who rated counselors high also rated the agency or service delivery system high with both receiving a higher preponderance of positive ratings.

SUMMARY

A pilot effort was directed at the analysis of two key points of the vocational rehabilitation service delivery system—"entering and exiting"—for a select group of white and nonwhite clients. The data analyzed revealed a number of areas in need of further study, namely: 1) Are referral source shifts noted in the pilot legitimate and what is the potential real impact of these changes for service delivery to nonwhites? 2) Does "failure to cooperate" as a reason for closure as used by counselors represent an ethnic bias or a legitimate reason for closure since "refused services" was the primary reason for closure for majority clients across statuses and across fiscal years while "failure to cooperate" was the predominant primary reason for closure for nonwhites, and 3) What accounts for the declines in placement rates for nonwhites, particularly where training has been completed?

Socio-cultural barriers notwithstanding, this preliminary or pilot effort has revealed the necessity for continuing to organize appropriate, accessible and manipulable data bases in NYS/OVR so that the equity and efficiency of the vocational rehabilitation service delivery system in New York can be monitored and its service delivery methods tailored to meet the needs of the pluralistic society to be served.

TABLE I

REHABILITATION OUTCOMES

PLACEMENT RATES (26/26 + 28) FOR MINORITY AND MAJORITY CLIENTS WHO FINISHED SERVICES

RACE	FFY 1982	FFY 1983	NET
Majority/White	71.4%	73.6%	+ 2.2%
Minority:			
Black (not Hispanic)	60.5%	61.1%	+ .5%
American Indian/ Alaskan Native	70.4%	58.6%	−11.8%
Asian/Pacific Islander	68.4%	61.3%	− 7.1%
Hispanic	(N/A)	(N/A)	(N/A)

TABLE II

REHABILITATION OUTCOMES

REHABILITATION RATES (STATUS 26) (26/26 + 28 + 30) FOR MINORITY AND MAJORITY CLIENTS

RACE	FFY 1982	FFY 1983	NET
Majority/White	57.7%	62.1%	+4.4%
Minority:			
Black (not Hispanic)	44.7%	47.9%	+3.2%
American Indian/ Alaskan Native	61.3%	61.3%	
Asian/Pacific Islander	55.9%	48.6%	−7.3%
Hispanic	(N/A)	(N/A)	(N/A)

TABLE III

REHABILITATION OUTCOMES

COMPETITIVE PLACEMENT RATES (STATUS 26 CLOSURES) FOR MINORITY AND MAJORITY CLIENTS

RACE	FFY 1982	FFY 1983	NET
Majority/White	50.9%	51.5%	+ .6%
Minority:			
Black (not Hispanic)	49.9%	48.5%	−1.4%
American Indian/ Alaskan Native	57.9%	64.7%	+6.8%
Asian/Pacific Islander	50.0%	47.1%	−2.9%
Hispanic	(N/A)	(N/A)	(N/A)

TABLE IV

REHABILITATION OUTCOMES

PERCENTAGE OF MINORITY AND MAJORITY CLIENTS COMPETITIVELY PLACED EARNING AT OR ABOVE THE MINIMUM WAGE

RACE	FFY 1982	FFY 1983	NET
Majority/White	71.4%	69.8%	− 1.6%
Minority:			
Black (not Hispanic)	66.4%	68.1%	+ 1.7%
American Indian/ Alaskan Native	63.6%	63.6%	
Asian/Pacific Islander	73.1%	84.4%	+11.3%
Hispanic	(N/A)	(N/A)	(N/A)

TABLE V

CHARACTERISTICS OF TOTAL (26, 28, 30's) CLIENTS SERVED IN FFY '83

Status 26's consisted of:	81.8%	Majority/White
	17.3%	Black (not Hispanic)
	.2%	American Indian/Alaskan Native
	.7%	Asian/Pacific Islander
	(N/A)	Hispanic
Status 28's consisted of:	71.7%	Majority/White
	26.9%	Black (not Hispanic)
	.3%	American Indian/Alaskan Native
	1.1%	Asian/Pacific Islander
	(N/A)	Hispanic
Clients closed in status 30 included:	71.8%	Majority/White
	27.1%	Black (not Hispanic)
	.1%	American Indian/Alaskan Native
	1.1%	Asian/Pacifica Islander
	(N/A)	Hispanic

For FFY '83 - Total of those closed in competitive employment were as follows:

82.8%	White
16.4%	Black (not Hispanic)
.2%	American Indian/Alaskan Native
.6%	Asian/Pacific Islander
TOTAL	100.0%

Total of those clients competitively placed earning at or above minimum wage (Earning greater than $133 for FFY '83):

82.9%	White
.2%	American Indian/Alaskan Native
16.1%	Black (not Hispanic)
.8%	Asian/Pacific Islander
TOTAL	100.0%

TABLE VI - REASON FOR CLOSURE FFY 1982

Ranked (highest to lowest) reason for closure by ethnic group and closure status displaying five most frequent reasons for NYS/OVR clients:

ETHNIC GROUP	STATUS 08	STATUS 28	STATUS 30
White	Refused services	Refused services	Refused services
	Failure to cooperate	Unable to locate	Failure to cooperate
	Handicap too severe	Failure to cooperate	Unable to locate
	Other	Handicap too severe	Handicap too severe
	Unable to locate	Other	Other
Black (not Hispanic)	Failure to cooperate	Unable to locate	Refused services
	Refused services	Failure to cooperate	Failure to cooperate
	Handicap too severe	Refused services	Unable to locate
	Unable to locate	Handicap too severe	Handicap too severe
	Other	Other	Other
Indian/Alaskan	Failure to cooperate	Failure to cooperate	Unable to locate
	Refused services	Handicap too severe	Handicap too severe
	Unable to locate	Other	Refused services
	Other	Refused services	Death
	Handicap too severe/ Institutionalized (tied for fifth place)	N/A	N/A
Asian/Pacific Islander	Refused services	Unable to locate	Refused services
	Unable to locate	Handicap too severe	Failure to cooperate
	Handicap too severe	Failure to cooperate	Handicap too severe
	Failure to cooperate	Refused services	Unable to locate
	Other	Other	Other

TABLE VII - REASON FOR CLOSURE FFY 1983

Ranked (highest to lowest) reason for closure by ethnic group and closure status displaying five most frequent reasons for NYS/OVR clients:

ETHNIC GROUP	STATUS 08	STATUS 28	STATUS 30
White	Refused services	Refused services	Refused services
	Failure to cooperate	Unable to locate	Failure to cooperate
	Other	Failure to cooperate	Unable to locate
	Handicap too severe	Handicap too severe	Handicap too severe
	Unable to locate	Other	Other
Black	Failure to cooperate	Failure to cooperate	Failure to cooperate
	Refused services	Unable to locate	Refused services
	Unable to locate	Refused services	Unable to locate
	Handicap too severe	Handicap too severe	Handicap too severe
	Other	Other	Other
Indian/Alaskan	Refused services	Refused services	Failure to cooperate
	Failure to cooperate	Failure to cooperate	N/A
	Other	Unable to locate	N/A
	Handicap too severe	Handicap too severe	N/A
	No vocational handicap	Other	N/A
Asian/Pacific Islander	Failure to cooperate	Unable to locate	Refused services
	Refused services	Handicap too severe	Handicap too severe
	Unable to locate	Failure to cooperate	Other
	Handicap too severe	Refused services	Unable to locate
	Other	Death; Institutionalized Other (three way tie)	Failure to cooperate

TABLE VIII

Referral sources for NYS/OVR clients by ethnic groups for FFY 1982 and FFY 1983 - five most frequent referral sources ranked (highest to lowest) for each ethnic group:

ETHNIC GROUP	FFY 1982 REFERRAL SOURCE	FFY 1983 REFERRAL SOURCE
White	Self	Self
	Health Organizations and Agencies	Health Organizations and Agencies
	Educational	Educational
	Hospitals	Hospitals
	Social Security and Public sources	Social Security and Public sources
Black	Self	Self
	Hospitals	Educational
	Educational	Social Security and Public sources
	Social Security and Public sources	Hospitals
	Health Organizations and Agencies	Health Organizations and Agencies
Indian/Alaskan	Self	Self
	Social Security and Public sources	Educational
	Hospitals	Social Security and Public sources
	Educational	Hospitals
	Health Organizations and Agencies	Health Organizations and Agencies
Asian/Pacific Islander	Self	Self
	Hospitals	Educational
	Social Security and Public sources	Hospitals
	Educational	Social Security and Public sources
	Health Organizations and Agencies	Health Organizations and Agencies

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